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GENERIC DESCENT OF THE PAPAGO VILLAGES

By J. W. HOOVER

THE region of southern Arizona and northern Sonora, Mexico, occupied by the Papago Indians, was called Papagueria by the Spaniards. The name is again coming into use as the area is made to stand out in sharper contrast with the lines of settlement and civilization drawing more closely about it. Broadly considered, it is the area south of the Southern Pacific Railway and west of the Santa Cruz River, and north of the Altar Valley, Sonora. Disregarding several considerable outlying villages or groups such as those at San Xavier and in Tucson, the Papago villages are confined to that part of the area which is bounded on the east by the Baboquivari Mountain range and related low mountain groups extending northward. These also roughly bound the Papago Indian Reservation. On the north, white settlement is approaching the reservation boundary line. The western boundary is less definite, as in this direction the desert becomes increasingly inhospitable, merging into great precarious empty waste spaces, too barren to support even Papago.[1]

As part of the Basin Range Province, the Papagueria is characterized by flat detrital plains, interrupted by low fault block mountains which occupy the minor part of the area. The mountains are in an advanced stage of erosion, rugged and almost bare of soil and vegetation, due to aridity and spasmodic rainfall. The products of disintegration have been emptied onto the relatively depressed areas and spread out smoothly.

Both mountains and plains, or so-called valleys, have north-northwest by south-southeast axes, and the Papagueria lies open both to the north and to the south. So, northward the Papago villages blend into the Pima villages of the Gila River, interrupted by the wedge of white settlement extending from Florence on the Gila River westward through Casa Grande. And southward, they blend into the river villages of the Altar Valley, Sonora, now mostly Mexican. The Indians of the latter valley are really Pima as the Spanish padres made the distinction. The settled groups on the river flats wherever found were called Pima, and the somewhat migratory desert Indians were called Papago.

The eastern border land, the Santa Cruz Valley, was formerly occupied by the Sobaipuris, who like the Pima on the Gila and Altar Rivers, irrigated their fields on the flats of the Santa Cruz and San Pedro Rivers.

[1] Godfrey Sykes, The Camino del Diablo: with Notes on a Journey in 1925 (Geographical Review, Vol. 17, pp. 62–74, 1927); Eldred D. Wilson, New Mountains in the Yuma Desert (Geographical Review, Vol. 21, pp. 22–228, 1931).

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It was the Sobaipuris for whom and by whom the Spanish missions were built. The picturesque and well preserved San Xavier Mission, about nine miles south of Tucson, was built at the largest village, Bac. The others were located at Guvavi, about nine miles north of Nogales, and at Tumacacori, midway between.

Fleeing before the ravaging Apache early in the nineteenth century, the Sabaipuris abandoned their villages and the missions, and took refuge among the Papago, with whom the tribe merged and lost its identity. The last one of the known Sobaipuri braves died in Tucson in March, 1932.[1] The present village at San Xavier was settled by Papago at a later date.

ECONOMIC ADJUSTMENTS TO THE LAND

Water, or rather its absence, is the critical factor or resource of the Papagueria; limiting in turn habitable sites where water may be had for domestic purposes; limiting the economically useful vegetation to short lived annuals and low scattered xerophytic perenniels suited to limited grazing; severely restricting the tillable lands in spite of extensive areas of flat land with deep fertile soils of the lime accumulating type. The rainfall varies from less than five inches in the west to as much as eighteen inches or more in the Baboquivari Mountains.

In recompense, the aridity has afforded a degree of security, for the area has offered little to hostile marauding Indians, or even to the covetous white man. Few white families could make a living on as much of this land as may support an entire Papago village. The very poverty of his land has been the Papago's guarantee, and his peaceful record is in large part due to the fact that he has had comparatively little provocation or interference. A high degree of adaptation through centuries of adjustment, combined with a low standard of living, have made it possible for over 5,000 Papago to live on about 5,000 square miles of this region, desertic both in climate and resources.

The Papago are the premier dry farmers, producing wheat on driest lands where it is known to be successfully grown, with as little as five inches of rainfall or less.[2a] Some years the crop fails entirely, for the rains do not always come. But yields as high as twenty-five bushels to the acre have been grown. A good harvest will furnish wheat enough to last several years, and the Papago have learned the wisdom of keeping a reserve on hand.

[1] The Arizona Republic, March 16, 1932, p. 1.

[2a] Carl Sauer and Donald Brand, Prehistoric Settlements of Sonora, with Special Reference to Cerros de Trincheras (University of California Publications in Geography, Vol. 5, No. 3, 1931), espc. p. 75.

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After a crop failure they prepare for a new crop with as much care as if a harvest were assured.[6]

In the Papago country, dependable sources of water and land which could be tilled were seldom found close together. The Papago adjusted themselves by a compromise between settled village life and nomadism through inter-village migration, commonly between two villages. Those of one type were reserve villages located at the foot of the mountains or in the foothills where there were sources of water that could be relied on. The other villages were out on the open plains adjacent to the fields and were farming communities temporarily occupied. In recent years, with the digging of deep wells near the latter villages, their relative importance has been reversed and the inter-village migrations have lost their seasonal character.

THE OLD HEAD OR PARENT VILLAGES

The present day Papago villages may be traced back to about twelve common centers prior to 1860. Each of these represents a tribe which, spreading from the main village or pair of villages, has established new communities. Some of these parent villages no doubt sprang from a few of the very oldest villages as Kaka, Achi (Santa Rosa), Anegam, Tecolote, and Gue Va (Quitovac).[4] The tribal areas coincide fairly well with the larger units of plains or drainage basins, imperfectly set apart by mountain ranges or groups. The parent villages with their descendant villages are as follows:

1. *Tecolote*, on the Tecolote plain, south of the Quijotoa Mountains had as its companion or reserve village, Cobabi, Sonora. A second reserve village developed at Cabota, also south of the boundary. Tecolote was a rallying point against the Apache, but now its people are scattered in a number of small communities or rancherias on the surrounding plain, such as San Rafael or Papala-vakamukik, and San Ignacio, with Molonites on the western front. The old village site is now virtually abandoned. Tecolote Indians settled Vamori, Poso Verde, San Miguel, and Indian Oasis. They also make up in part the villages of Chulik, Topowa, and Kavolik. A part of the Vamori people came from near Caborca in Sonora.

2. *Kupk* (Copeks), with its descendant villages and people, occupies the Quijotoa plain. Its companion reserve village, San Antone and Kupk itself, have shrunk to insignificance. Kupk was parent to Kavolik, Pisinemo, and Haal Muik, with their reserve village, Poso Blanco; and in recent

[6] W. J. Spillman, Extra-dry Farming (Farm Journal, March, 1928, p. 22).
[4] See also Carl Lumholtz, New Trails in Mexico (New York, 1912), pp. 355–56.

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361 years to the smaller villages, Comevo and Cheweeton. Southward the
621 plain extends into Sonora and includes San Francisco (Chuo Güsh), with Hiaspak and Vapk.

3. *Gue-oo* (corrupted to Kerwo or Cubo), with its descendant villages occupied the series of valleys with their north-south axes flanking the Quijotoa plain on its west side. Northward the descendant villages extend into the Poso Redonde Valley, westward over the Barajita Valley, and southward across the La Aquituni Valley or plain, with the most important villages bearing the same names. Still farther south, the plain east of Nariz Mountains includes Comoti, Arizona, and Sinunyui Poduk, Sonora, with Tatschak as its reserve village.

4. *Perigua* is the old village of the Perigua Valley. Its descendant villages are Road Runner, Emita, Toapit, with Poso Colorado, and Poso Redondo, in part, as reserve villages. These people are believed to have come originally from Kaka.

5. *Kaka*, with its emergency village, Moivaxia, south of the Sand Tank Mountains, is parent to the large village, Akchin, near Maricopa, and to Sil Mukik, near Gila Bend.

6. *Kuitak*, or Iron Pipe Village, in the lower or southern Santa Rosa Valley, was preceded by Vachk, the "Batqui" of Father Kino,[8] and is now almost extinct. It was the emergency village for Big Fields, to which it is now the most important center. It was also parent to the villages of the Cobabi Mountains and of the South Comobabi Mountains, viz., Cobabi, which is the oldest reserve village, San Luiz, Nolic, Santa Cruz, and Rincon; also to the villages at the north ends of the Baboquivera and Coyote Mountains, viz., Vafkuk (Babakuk), Coyote, Alamo, and San Piedro. Tusconcito and part of the population of Indian Oasis are also of this group. The major part of the Papago village in Tucson is from Big Fields.

7. *Santa Rosa*, whose predecessor was the older village Achi, is still an important center in the Santa Rosa Valley, but at times dwindles to several families. Its most important emergency village is Covered Wells. It is parent to the small communities to the south and east, and to the present large village, Bac, at the San Xavier mission.

8. *Akchin*, just south of Santa Rosa, had Comobabi as its reserve village. Later the other small villages of the North Comobabi Mountains sprung from it, and also Skoskonik.

[8] "Nuestro Senora de la Merced del Batqui" (Kino's Historical Memoirs of Pimeria Alta, 1683-1711: edited and annoted by Herbert Eugene Bolton, 2 vols., Cleveland, 1919, Vol. 1, p. 208).

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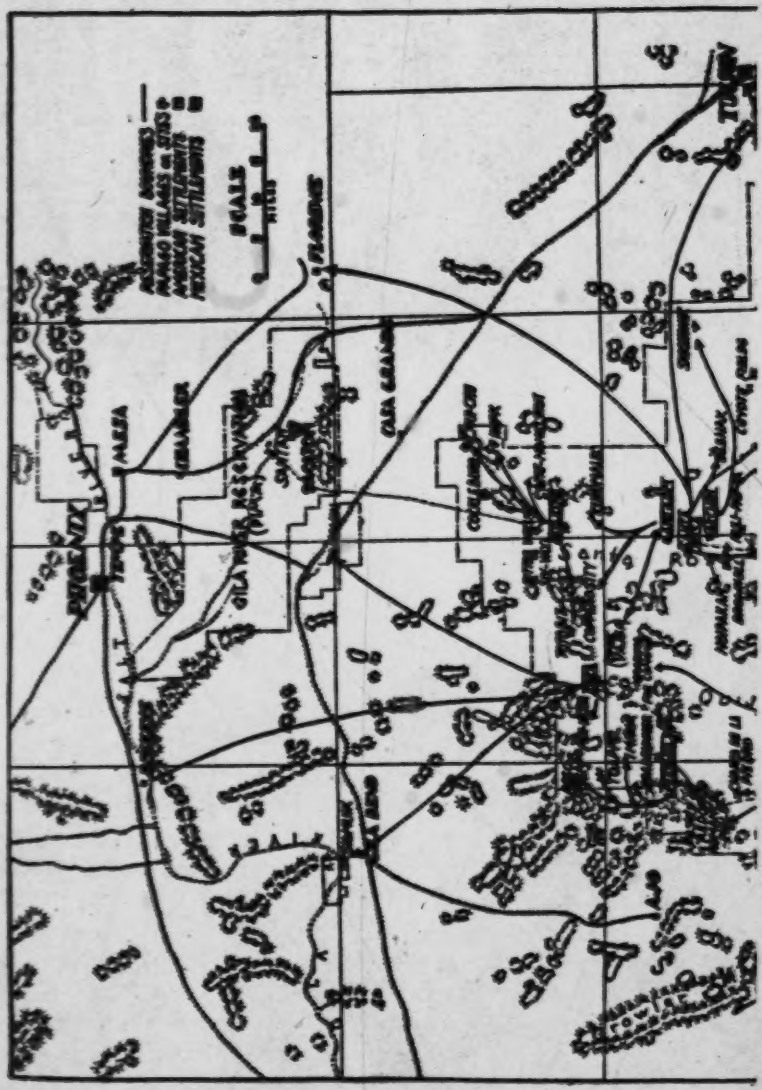

[Facing p. 260(A)]

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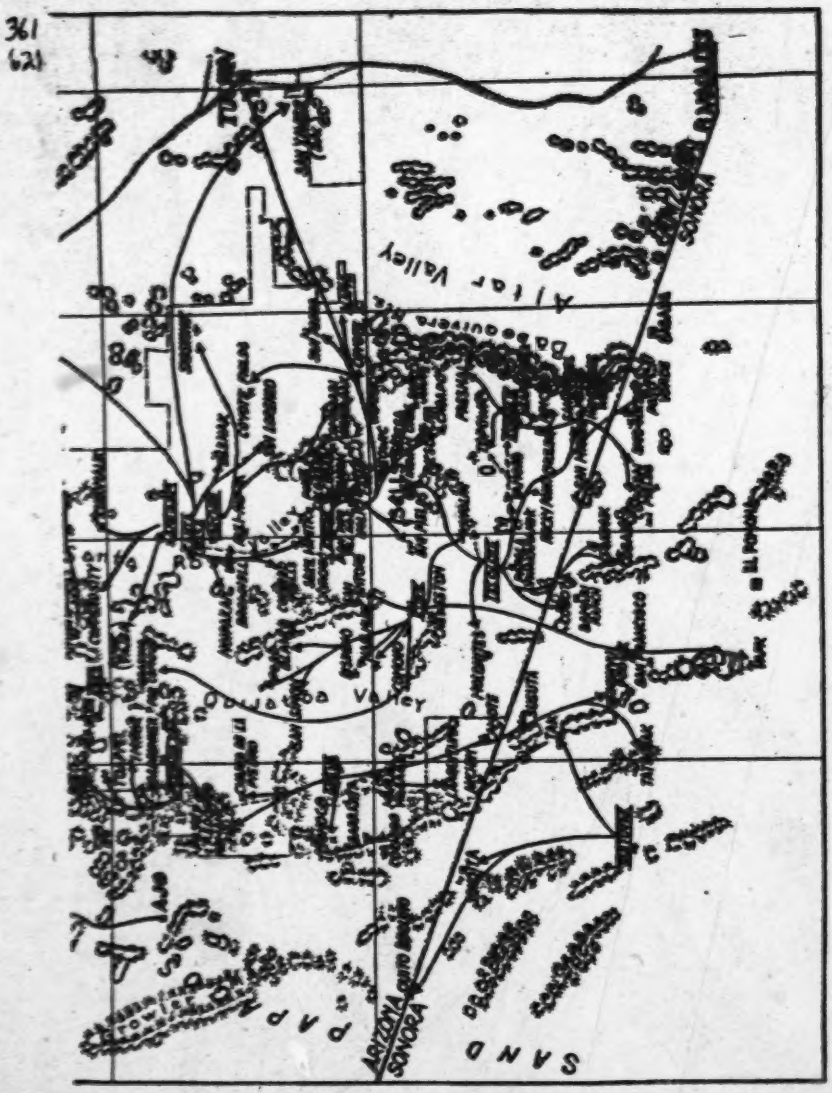

FIG. 1. Location and interrelation of Papago villages of southern Arizona and northern Sonora.

[Facing p. 260 (B)]

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Sand Papago

361 9. *Anegam*, of the upper Santa Rosa and tributary valleys, is the new
621 site of the village Omik-vaxia (Salt Well). The latter was located on "the strip" withheld from the reservation in 1917. The Indians were at that time forced to move their village. With the inclusion of "the strip" into the reservation, some return movement may be expected. Copperosity (Chuopo) was the reserve village. Kukomalik was also settled by these people. Anegam is now one of the largest of all the villages.

10. *Quajote*, on the plain between the Slate and Vekol Mountains, with its reserve village, Bitter Wells, is parent to the villages northward, toward Casa Grande. Some of these people settled at Santan on the Gila River and on the Salt River, and are living among the Pima.

11. *Komalik* is the old Baboquivera Valley village. Its ancient reserve village was Comobabi, Sonora, but nearer reserve villages developed along the Baboquivera Range, the most important of which was Fresnal. They no longer trek to Comobabi, and this village together with Cobabi and the neighboring communities of the piedmont and valleys on the east side of the Sierra de Cobota, Sonora, although of independent origin, have, by virtue of geographical unity, propinquity, and the international boundary, become a distinct unit in Sonora.

221 12. The *Sand Papagos* have been the most nomadic of the Papago
361 tribes. They occupy the truly arid region west of the Ajo Mountains.
621 Rainfall diminishes toward the Gulf of California, where it averages as
[32] little as two and one-half inches a year.[6] The reservation does not extend
184 beyond the Ajo Mountains, and there is no need for it, as the region is and must remain virtually uninhabited by whites except for the former copper mining camp at Ajo. The existence of these people depended upon their knowledge of the places in mountains where there are natural water tanks, such as Tinas Altas,[7] the Tule Tanks, and the Papago Tanks. The latter is a small oasis with an abundance of shade, grass, and a little ribbon of flat fertile valley.[8] For food the Sand Papagos ran down jack rabbits in the loose sand, killed mountain sheep, mule deer, and antelope with bows and arrows, and caught muskrats. They ate lizards, and at certain seasons went to the coast to fish and to obtain salt. Only a single agricultural site has been attributed to these people, southeast of Tinajas de Emilia in Pini-

[6] Godfrey Sykes, Rainfall Investigations in Arizona and Sonora by means of Long Period Rain Gauges (Geographical Review, April, 1931, pp. 229–33).

[7] Kirk Bryan, The Papago Country, Arizona: Geologic, and Hydrologic Reconnaissance with a Guide to Desert Watering Places (U. S. Geological Survey, Water Supply Paper 499, Washington, pp. 132–34).

[8] W. T. Hornaday, Camp Fires on Desert and Lava (New York, 1909), pp. 181–82, 235.

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22 36 631 184 cate. Their vegetable food was largely the camote, an edible root found in the sand dunes, together with the beans of the mesquite and the fruit of the saguaro and pitahaya cacti, for which they came as far as Quitoboquito and the lower Sonoita River.[9] A few of them even now have temporary camps, as of old, south to the Gulf.[10]

Quitovac, the old head village for the Sonoita Valley, is Sand Papago in kinship. Descendant therefrom was the Papago village at Sonoita and the now extinct village of Tak and the nearly extinct village, Quitoboquito. Sonoita was an attractive and favored site, as the Sonoita River is here a permanent stream. The present village is composed mostly of Mexicans, numbering about 600, who crowded out the Papago. At present there are five Papago families with about sixty people at the lower end of the village.[11] Quitoboquito is a small oasis with one of the largest springs in the Papago country.[12] It never was but a small village,[13] and the population is now reduced to one half-breed family operating a cattle ranch. The spring is on the American side of the boundary line, but the fields and ranch are in Sonora.

Several small villages of Sand Papago are located around Ajo. They are a nomadic and very poor people, having small houses and a field here and [161] there. The largest remnant of the Sand Papago is located at Dome and Blaisdell, about twenty miles east of Yuma. The population of the two villages totals about two hundred. They have fields along the Gila River and [404] work as laborers on the Southern Pacific Railway.

FACTORS INFLUENCING SHIFTS OF PAPAGO VILLAGE SITES OR OF THEIR POPULATIONS

178 648 Several factors have contributed toward a disintegration of the older and larger villages. To begin with, a degree of concentration was a necessity for security, especially against Apache raids. As the Apache extended the range of their raiding activities over the Santa Cruz and Altar Valleys, the Papago abandoned all out-lying villages.

At this time the old village of Poso Verde, Sonora, was deserted and its [361] people went to Comobabi, Sonora. The place became frequented by Apache bands. In 1874 the only evidences of habitation were the remains of a few bacquals and of an old adobe fort built by the Papago as a protection for their frontier village and grazing range. The "well" was described as a sort [312] of pit or natural tank with a strong flavor of alkali, cow-manure, dead coyotes, and decayed vegetables.[14]

[9] Lumholtz, pp. 330–31.

[10] A list of the former camps of the Sand Papagos is given by Lumholtz, pp. 394–97.

[11] A Papago family may include married offspring living under the same roof.

[12] Kirk Bryan, pp. 164–65.

[13] Hornaday, p. 122.

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coyotes, and decayed vegetables.[14] Settled again from Tecolote, Poso Verde, situated in a semicircle of foot hills, is now one of the most pleasing of all the Papago villages.

The "trincheras" or walled fortifications on the isolated mesa four miles east of San Miguel were built by the Papago as a retreat in case of Apache raids. They are in this respect distinct from the prehistoric trincheras on the mount just south of Sells, near Poso Verde, and through the Altar Valley, described by Sauer and Brand.[15]

The most important factor in making new and smaller settlements desirable has been the introduction of cattle, dating from the journeys of Father Estubio Kino, 1691–1702, followed by those of Father Garcés, 1768–1775. Along with Christianity, Father Kino introduced cattle, horses, and chickens. Cattle did not become important with the Papago, however, until the latter part of the nineteenth century, and the extensive areas between their limited fields were of little use to them except as game preserves. By hunting and gathering in these areas, they supplemented the produce of their fields, but no inducement was offered to permanent settlement of these areas. In 1849–1850 John Audobon described the Papago as fast passing away, judging from the dilapidation of the towns and the number of empty houses.

> The people live on turtles and what game they can get. I have seen small elk and antelope skins dressed and terrapin shells are everywhere. We have bought two terrapins fresh killed, some roots, and the fruit of a plant called the manguey.
>
> Why it is that these Indians settle in such a country, I cannot conceive, for even the lizards, in most places innumerable, are scarce here. The Indians kill them with a light wand, giving them a dextrous tap on the head. They pick up the game, slip the head under a belt or string round their waists, and when sufficient are collected, a little fire is made, and this delicate repast is enjoyed by them as an epicure would relish his brace of woodcock.[16]

Audobon also described a sort of mush made of grasshoppers. The insects were caught and dried, then pounded and mixed with meal or pinole, parched wheat or corn, spiced and pounded.

Pastoralism is better suited to a scattered population, so the tendency has been for the larger villages to break up into more scattered settlements. The passing of the old Tecolote village in favor of smaller communi-

[14] J. Ross Browne, Adventures in the Apache Country (New York, 1874), p. 277.

[15] Carl Sauer and Donald Brand, Prehistoric Settlements of Sonora, with Special Reference to Cerros de Trincheras (University of California Publications in Geography, Vol. 5, No. 3, 1931), espc. pp. 67–70.

[16] Audobon's Western Journal, 1849–50 (Cleveland, 1906), pp. 148–50.

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ties and ranches is a good illustration. Grazing has enabled the non-tillable lands to be put to use, and many of the Indians prefer to live on or near their grazing lands.

Other factors responsible for the passing of the old order have been the digging of wells by the government which have scattered more widely the sources of dependable water, the development of mining communities, and increasing contact with the white population.[17]

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[17] There has been considerable variation in the names and spelling of names of Papago villages as given by various writers. Some revision is suggested of the names used on the government maps published in connection with Water Supply Paper 499. The Indian names are given preference in the present study, except where corruptions of them, or Spanish and American names, have become a matter of common usage. The U. S. Geographic Board has as yet taken no action concerning these names.

Special acknowledgment is due Father Bonaventura Oblasser, Superior of Franciscan Missions among Desert Papagos, for the invaluable assistance of his experience among the Papago.